



# COAA Course Project

By ETD Batch 1 Group 2

A decorative graphic on the left side of the slide consisting of two overlapping parallelograms. The front parallelogram is blue and the back one is a light green. They are positioned diagonally, with the blue one in front of the green one.

# Password Validity Checking System

## ETD-02

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## **Problem Statement**

To write a program in 8086 Assembly Language that checks an input string against a password string stored in memory and outputs a message based on whether the password is matched or not.

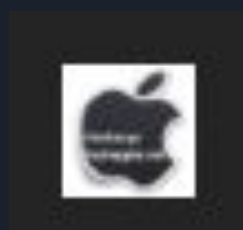


# Introduction and Objective

- This is a password validity checking system designed with assembly language used to program the 8086 Microcontroller .
- This program/project accepts a string as input from the user and compares it with the password hardcoded in the program.
- The main objective of this project is to practically implement fundamental concepts of assembly language programming.
- With the application of these concepts we can design small applications like these which helps you in getting more well versed with assembly language programming.

# Tools Used

- DOSBox : DOSBox is a free and open-source emulator which runs software for MS-DOS compatible disk operating systems—primarily video games. It was first released in 2002.
- TASM 1.4 : Turbo Assembler aka tasm is an assembler for software development published by Borland 1989.



# Methodology

## Data Segment

- Password and input message are stored.
- Messages to be displayed are stored.

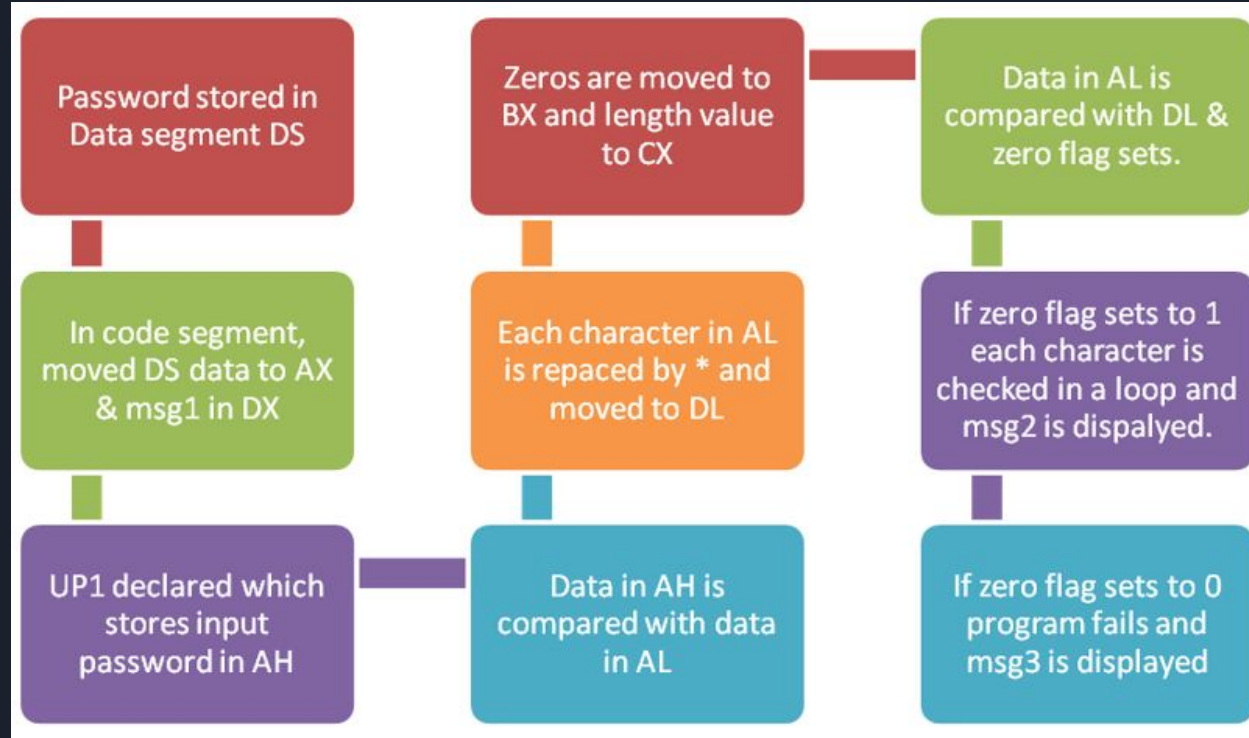
## Code Segment

- Input and password is DS is moved and checked.
- Compared and zero flag sets.

## Zero Flag

- If sets to 0, array elements don't match and MSG3 is displayed.
- If sets to 1, array elements match and MSG2 is displayed.

# Flow of the Project





# Result

C:\TASM>edit project.asm

C:\TASM>tasm project.asm

Turbo Assembler Version 3.0 Copyright (c) 1988, 1991 Borland International

Assembling file: project.asm

Error messages: None

Warning messages: None

Passes: 1

Remaining memory: 475k

C:\TASM>tlink project.obj

Turbo Link Version 2.0 Copyright (c) 1987, 1988 Borland International

C:\TASM>project.exe

Enter your password: \*\*\*\*

Correct Password, Welcome!!

C:\TASM>project.exe

Enter your password: \*\*\*\*

Incorrect Password, Please try again!



## Conclusion

- The given password in data segment is successfully checked and compared with input password by user.
- The result of above operated is displayed using appropriate messages after giving input by user.
- Each time program is terminated with exit code 0 properly without any error.



# Thank You!

[Project Report](#)

[Github Repo](#)